## **ABSTRACT OF THE INVENTION**

Disclosed is a method of automated speaker identification, comprising receiving a sample speech input signal from a sample handset; deriving a cepstral covariance sample matrix from said first sample speech signal; calculating, with a distance metric, all distances between said sample matrix and one or more cepstral covariance signature matrices; determining if the smallest of said distances is below a predetermined threshold value; and wherein said distance metric is selected from  $d_5(S,\Sigma) = A + \frac{1}{H} - 2$ ,

$$d_6(S,\Sigma) = (A + \frac{1}{H})(G + \frac{1}{G}) - 4 , d_7(S,\Sigma) = \frac{A}{2H}(G + \frac{1}{G}) - 1 , d_8(S,\Sigma) = \frac{(A + \frac{1}{H})}{(G + \frac{1}{G})} - 1 ,$$

$$d_9(S,\Sigma)=\frac{A}{G}+\frac{G}{H}-2 \ , \ \text{fusion derivatives thereof, and fusion derivatives thereof}$$
 with 
$$d_1(S,\Sigma)=\frac{A}{H}-1 \, .$$

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